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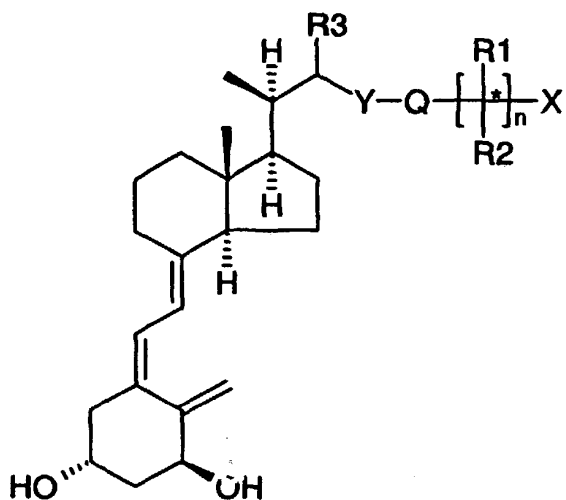
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(54) Title: USE OF VITAMIN D-DERIVATIVES IN THE TREATMENT OF OSTEOPOROSIS AND RELATED BONE DISOR-
DERS, AS WELL AS NOVEL VITAMIN D3-DERIVATIVES

(I)

(57) Abstract: Compounds of the formula (I) wherein X represents hydrogen or hydroxy; Y represents oxygen or sulphur or oxidized sulphur selected from the groups S(O) and S(O₂); R¹ and R², which may be the same or different, represent hydrogen or a residue after removal of 1 hydrogen atom from a straight, branched or cyclic, saturated or unsaturated, C₁-C₆-hydrocarbon; or R¹ and R², together with the carbon atom to which they are attached (marked with an asterisk in formula (I)), bearing the group X, form a C₃-C₈ carbocyclic ring; Q represents a diradical residue after removal of 2 hydrogen atoms from a straight, branched or cyclic, saturated or unsaturated C₁-C₈-hydrocarbon; R³ represents hydrogen or a residue after removal of 1 hydrogen atom from a straight, branched or cyclic, saturated or unsaturated C₁-C₆-hydrocarbon; R¹, R² and/or Q is optionally substituted with one or more deuterium or fluorine atoms; and n is 0 or 1; and derivatives of the compounds of formula

(I) in which one or more hydroxy groups have been transformed into -O-acyl or -O-glycosyl groups, or a phosphate ester, such masked groups being hydrolyzable in vivo; may be used for the preparation of a medicament for the treatment and/or prophylaxis of osteoporosis and related bone disorders.

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